

**IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
NORFOLK DIVISION**

Latasha Holloway, et al.,

Plaintiffs,

v.

City of Virginia Beach, et al.,

Defendants.

Civil Action No. 2:18-cv-0069

Defendants' Memorandum of Law in Support of Motion for Summary Judgment

EXHIBIT FOUR

Expert Report of Douglas M. Spencer, Ph.D.

July 15, 2019

Expert Report:

Racially Polarized Voting in Virginia Beach

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Purpose and Summary

I have been asked by the Campaign Legal Center to analyze election returns in the city of Virginia Beach, Virginia. I have specifically been asked to assess whether there is any evidence of racially polarized voting and whether white bloc voting is usually sufficient to defeat minority candidates of choice. Using election data from fourteen races between 2008-2018 I find the following:

1. Despite a citywide black population of approximately 90,000 (20%), only six African Americans have ever served on the Virginia Beach City Council in its fifty-five year history. Of the 605 possible seats during that time (eleven seats × 55 years) less than 1% have been occupied by an African American.
2. The overall lack of minority representation on the City Council is not due to a lack of minority candidates. Between 2008-2018, 23% of all candidates on the ballot for the City Council (20 out of 87) were black, yet just five won their election.
3. There is evidence of racially polarized voting between minority and white voters in Virginia Beach elections. Excluding George Furman, a black candidate who ran and lost in 2010, 2014, and 2016 and was not the candidate of choice among black or other minority voters in any of those elections, ten of the 16 black candidates who ran were the candidates of choice for minority voters.
4. Of the ten candidates of choice for black voters, seven faced strong opposition by white voters and were defeated by white bloc voting.
5. There is strong evidence of voting cohesion between black voters and other minority group voters in city council elections.
6. There is also strong evidence of racially polarized voting in federal elections, including the 2008 Democratic presidential primary.

Measuring Racially Polarized Voting

Because voting is a private act, it is impossible to know for certain how individuals cast their ballots. How is it possible, then, to estimate the preferences of white or minority voters when their individual identity is not known? Exit polls and surveys are one way to match the demographic characteristics of a voter with his or her vote choice. Unfortunately, there is no historical survey data on vote choice that are representative of racial minority groups in Virginia Beach over the time period of my analysis. Instead, I leverage information about individual voting precincts to infer the voting behavior of demographic subgroups, using the following three methods: (1) homogeneous precinct analysis, (2) ecological regression, and (3) ecological inference.

Homogeneous Precinct Analysis

The first method for inferring the voting behavior of racial groups compares the election outcomes in voting precincts that are racially homogeneous. An example is presented in Table 1. This example illustrates how precinct-level demographics and vote totals can be used to estimate support for different candidates among different racial groups. In statistical parlance, we observe the “marginal distributions” of data that give us a single piece of information, such as how many white people live in a precinct or how many votes the Democratic candidate got, and use this data to estimate unobserved “joint distributions,” such as how many white people voted for the Democratic candidate.

	<u>Precinct 1</u>		<u>Precinct 2</u>		
	Candidate A	Candidate B	Candidate A	Candidate B	
Black voters	?	?	3	?	?
White voters	?	?	97	?	?
	90	10	100	8	92
					100

Table 1: Hypothetical voting precincts with 100 voters. The marginal distribution (numbers outside the box) is observed while the joint distribution (question marks inside the boxes) is unobserved. Homogeneous precinct analysis uses the marginal distribution to estimate the joint distributions. In this example, the election returns in Precinct 1 show that white voters strongly preferred Candidate A, while election returns in Precinct 2 shows that black voters strongly preferred Candidate B.

Homogeneous precinct analysis is used to estimate joint distributions by looking at the election results in precincts where the population is very homogeneous. In the example in Table 1, Precinct 1 is 97% white and Precinct 2 is 95% black. The intuition behind homogeneous precinct analysis is that the election outcomes in Precinct 1 will be a good proxy of how white people vote more generally and the election outcomes in Precinct 2 will be a good proxy of how black people vote more generally.

Ecological Regression

One important limitation to homogeneous precinct analysis is its reliance on a small subset of voting precincts. Ecological regression compensates for this problem by extrapolating voter behavior from the correlation of race and candidate preference across the entire sample of voting precincts. In practice, ecological regression plots the vote totals for a candidate on the y-axis against the target population on the x-axis and uses ordinary least squares (OLS) regression to fit a line through the data.¹ The “best-fit” line is then used to estimate support for each candidate: white support is the value where the trend line crosses 100% in a plot of white citizen voting age population (CVAP) and minority support is the value where the trend line crosses 100% in a plot of minority CVAP. This method is illustrated in various figures throughout this report. One limitation of ecological regression is its reliance on linear regression, which can be negative or exceed 100%, adding some confusion to the model’s practical interpretation.² Ecological regression can also be misleading when the underlying data do not have a linear relationship.³ To address this problem, I turn to a third method that has become the gold-standard for evaluating racially polarized voting in Voting Rights Act litigation: ecological inference.

¹For an overview of the mechanics of ecological regression see Leo S. Goodman, *Some Alternatives to Ecological Correlation*, 64 AM. J. SOC. 610 (1959) and J. Morgan Kousser, *Ecological Regression and the Analysis of Past Politics*, 4 J. INTERDISC. HIST. 237 (1973).

²In this report, when ecological regression estimates are negative or exceed 100% I report the coefficients as 0 or 100, respectively.

³See D. James Greiner, *Causal Inference in Civil Rights Litigation*, 122 HARV. L.REV. 533 (2008).

Ecological Inference

Whereas homogeneous precinct analysis is conceptually compelling, it throws away a substantial (majority) percentage of relevant data. Whereas ecological regression incorporates all available data and is visually compelling, it presumes a linear relationship between election returns and the racial composition of voting precincts, which may not be true.

A third method, developed by Gary King at Harvard, addresses these particular limitations.⁴ King's ecological inference (EI) improves on previous attempts at ecological inference by generalizing the relationship between marginal and joint distributions (see Table 2) and employing OLS regression to estimate a relationship that is always linear based on observations from the full dataset of voting precincts.

Instead of comparing election outcomes to the size of the minority population, King's EI leverages the fact that voting preferences between white voters (β_i^w) and nonwhite voters (β_i^b) will always be linear. Using the notation in Table 2:

$$\beta_i^w = \left(\frac{T_i}{1 - X_i} \right) - \left(\frac{X_i}{1 - X_i} \right) \beta_i^b$$

This relationship is called the "method of bounds" and formalizes the simple fact that white support for a candidate can be inferred by subtracting the nonwhite vote from the total of possible votes. When there are more possible votes than nonwhite votes (or more nonwhite votes than possible votes), the estimated white support will fall into a range. This range is bounded by the particulars of each precinct. For example, if 90% of voters supported Candidate A and 80% of all voters were white, then white support for Candidate A must fall somewhere between the bounds of 70% (if all nonwhite voters supported Candidate A) and 80% (if no nonwhite voters supported Candidate A). King's EI then uses regression analysis to narrow those

	Candidate A	Candidate B	
Nonwhite voters	β_i^b	$1 - \beta_i^b$	χ_i
White voters	β_i^w	$1 - \beta_i^w$	$1 - \chi_i$
		T_i	$1 - T_i$
			N_i

Table 2: Marginal distribution (χ_i, T_i) and joint distribution (β_i^b, β_i^w) of vote shares for two candidates.

⁴See GARY KING. A SOLUTION TO THE ECOLOGICAL INFERENCE PROBLEM. (1997). See also GARY KING ET AL. ECOLOGICAL INFERENCE: NEW METHODOLOGICAL STRATEGIES.(2004), BERNARD GROFMAN, LISA HANDLEY & RICHARD G. NIEMI. MINORITY REPRESENTATION AND THE QUEST FOR VOTING EQUALITY. (1994), and Kosuke Imai, Ying Lu & Aaron Strauss, *Bayesian and Likelihood Inference for 2×2 Ecological Tables: An Incomplete Data Approach*, 16 POL. ANALYSIS 41 (2008).

bounds based on the bounds of similar precincts. When there are many demographically similar precincts the EI estimates become quite precise, meaning the confidence interval for each estimate is small. When there are few demographically similar precincts the confidence intervals are larger. Because King's EI is not as easily explained as homogeneous precinct analysis, nor as visually intuitive as ecological regression, I present the results of all three methods in my analysis below. The strongest case that voting is racially polarized is when all three methods generate similar estimates and point in the same direction, which is nearly always the case in Virginia Beach.

Racial Polarization in City Council Elections

The Virginia Beach City Council has eleven members who are elected to four-year terms in the November general election. Nearly all candidates run as independents. Five members are elected in presidential years and six members are elected in midterm years. All members are elected at-large though seven seats have a residency requirement and one seat is designated as the Mayor. See Table 3. There are currently two black members of the Virginia Beach City Council, both of whom were elected in 2018.⁵ Before 2018, just four black residents in the city's fifty-five year history had ever served on the Council (three elected and one appointed) despite a citywide black population of 83,000, or 18%.⁶ The overall lack of minority representation is not due to a lack of minority candidates. Between 2008 and 2018 23% of all candidates for the Council (20 out of 87) were black. However, there is strong evidence of racially polarized voting between minority and white voters in Virginia Beach elections. Ten of the 17 black candidates who ran were the candidate of choice for black and other minority voters.⁷ Of the ten candidates who were the candidate of choice, seven faced strong opposition by white voters and were defeated by white bloc voting.⁸

⁵A directory of the current Council is available at: <https://www.vbgov.com/government/departments/city-clerk/city-council/Pages/city-council-members.aspx>.

⁶As of 2017 the Census reports that the share of Virginia Beach's population that is Black or African American (and not Hispanic) is 18.42%. See ACS Demographic and Housing Estimates, 2013-2017 American Community Survey 5-year Estimates (Table DP05).

⁷I exclude George Furman who ran for the City Council in 2010, 2014, and 2016 but was not the candidate of choice among black voters in any of those elections. See Appendix B.

⁸I am still gathering electoral data and intend to analyze more elections as data become available, particularly the elections involving Ron Villanueva, a Filipino, who served on the city council between 2002-2009.

Election			
	year	method	Residency req.
Presidential	1	at-large	– (Mayor)
	2	at-large	–
	3	at-large	Centerville
	4	at-large	Kempsville
	5	at-large	Rose Hall
Midterm	6	at-large	–
	7	at-large	–
	8	at-large	Bayside
	9	at-large	Beach
	10	at-large	Lynnhaven
	11	at-large	Princess Anne

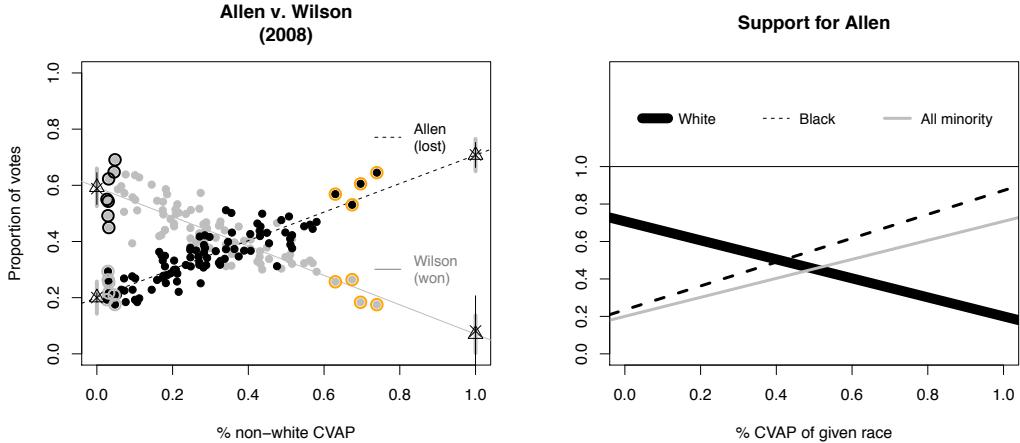
Table 3: Overview of the election year, method, and residency requirement for seats on the eleven-member Virginia Beach City Council.

A Guide for Interpreting Figures in this Report

Consider the case of Georgia Allen, a black female who challenged the white female incumbent Rosemary Wilson for the at-large city council seat in 2010. Although Ms. Allen was the candidate of choice for minority voters, she lost the election with just 35% of the vote. Figure 1 (next page) plots the proportion of voters that supported Ms. Allen on the y-axis against the proportion of the minority citizen voting age population (CVAP) on the x-axis. Each dot in the left panel represents one precinct. Support for Ms. Allen spanned a range from 23% in the Capps Shop precinct to 67% in the Newtown precinct. Her support increased as the percent minority CVAP increased. The results of all three statistical methods are presented.

The homogeneous precinct analysis compares vote totals in the most racially homogeneous precincts. Thirteen precincts in Virginia Beach were majority-minority in 2008. The Baker, Newtown, Davis Corner, and Reon precincts had a minority population that exceeded $> 60\%$ and they are circled in orange in the figure. Five precincts—Capps Shop, Kings Grant, Lake Joyce, Ocean Park, and Rudee—are all at least 96% white and are circled in gray. Support for Ms. Allen in the homogeneous minority precincts was 58.7% ($sd=4.9$) compared to just 24.4% ($sd=4.0$) in the homogeneous white precincts.

The dotted diagonal line in the left panel represents the “best-fit” line of the ecological regression. This regression extrapolates from the observed data to provide estimates of support when minority CVAP is 100% and when white CVAP is 100%,



Georgia Allen

	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Black support (%)	59.4	87.2	86.3*
All minority support (%)**	58.7*	70.8*	70.5*
White support (%)	22.9	20.0	19.9

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 1: Estimated support for Georgia Allen in the 2008 election for Virginia Beach's at-large seat. All three methods of estimating support for Ms. Allen by race illustrate that she was the candidate of choice for all minority voters—by individual race and as a coalition—and that white bloc voting contributed to her defeat.

and is marked by Δ in the figure.⁹ 95% confidence intervals are marked with gray vertical lines. The ecological regression estimates that 70.8% of minority voters supported Ms. Allen compared to 20.0% of white voters ($\pm 5.7\%$). This difference is large and is statistically significant ($p < 0.001$).¹⁰

The estimates generated using King's EI are very similar with an estimated 70.5% support among minority voters ($\pm 4.29\%$) and 19.9% support among whites ($\pm 1.8\%$). King's EI estimates are plotted in the left panel with an \times and the 95% confidence intervals are plotted as vertical solid lines. The difference between King's EI estimates for minority and white support is statistically significant ($p < 0.001$).

Together these three different approaches—homogeneous precinct analysis, ecolog-

⁹White support is plotted where black CVAP is 0% for illustrative purposes. White CVAP is not necessarily 100% when black CVAP is 0%.

¹⁰Statistical significance is determined using a Student's t-test.

ical regression, and King's EI— suggest that all minority voters strongly preferred Ms. Allen and that white voters did not. Furthermore, King's EI can be used to show that Ms. Allen was the preferred candidate of black, and other minority voters by overwhelming margins (and much larger than the winning candidate's vote total of 44%). In the right panel I plot the ecological regression best-fit line predicting support for Ms. Allen by race. The lines representing black and other minority precincts are all pointing in the same direction; all have a positive slope, meaning the larger the minority population in a precinct the more support for Ms. Allen. On the other hand, the best-fit line representing white precincts cuts in the opposite direction, illustrating white bloc voting against Ms. Allen. To illustrate the implications of this opposition, I plot the vote totals for the candidate that won the at-large seat that Ms. Allen contested in 2008. See gray dots in the left panel of Figure 1. Support for Ms. Allen's white opponent, Rosemary Wilson, exceeded 53.2% in homogeneous white districts, but was just 22.0% in homogeneous minority precincts. Minority support for Ms. Wilson was just 7% based on ecological regression and 8% based on ecological inference. Wilson ultimately defeated Allen 44.1% to 34.6%. According to the voting patterns in Figure 1, Ms. Allen was the clear candidate of choice for all minority voters—by individual race and as a coalition—and white bloc opposition voting contributed to her defeat.

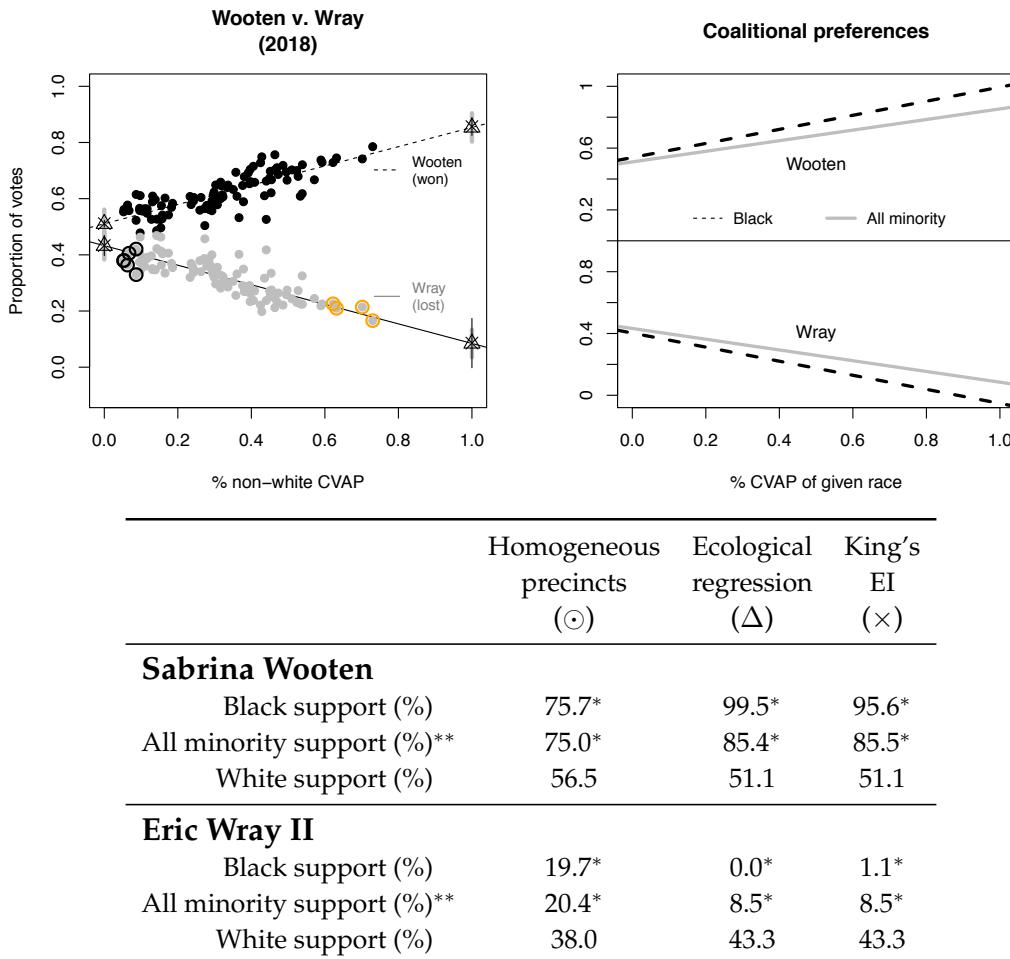
RPV Analysis of Minority Candidates

In the pages that follow, I present figures and captions for every race that involved a nonwhite candidate between 2008-2018. In the table below, I summarize the racial polarization of every “probative” election between 2008-2018. I define elections as probative of racially polarized voting when they feature a minority candidate running for the office under investigation; in this case the City Council. In seven of the fourteen probative elections in my sample I find strong evidence of racially polarized voting: racial minority voters are cohesive in their support for a particular candidate and white voters opposed the same candidate sufficiently to deter his or her election. In addition, in 11 of the 14 races I find evidence that all minority voters share the same strong preference for a candidate and vote as a coalition. In the sections that follow I present a detailed analysis of each race followed by a summary of all races in each election year.

		Minority coalition	White cohesion	White opposition
2018	At-large Princess Anne	✓		
2016	Mayor Kempsville	✓ ✓	✓	✓
2014	At-large Rose Hall Princess Anne	✓ ✓ ✓	✓ ✓	✓
2012	Kempsville	✓	✓	
2011	Rose Hall	✓	✓	✓
2010	At-large Bayside Princess Anne	✓ ✓	✓ ✓	✓ ✓
2008	At-large Kempsville	✓ ✓	✓ ✓	✓ ✓

Table 4: Summary of racial polarization in voting by probative elections, which are defined as previous city council races that featured a minority candidate.

2018 Virginia Beach City Council Election
(Centerville)

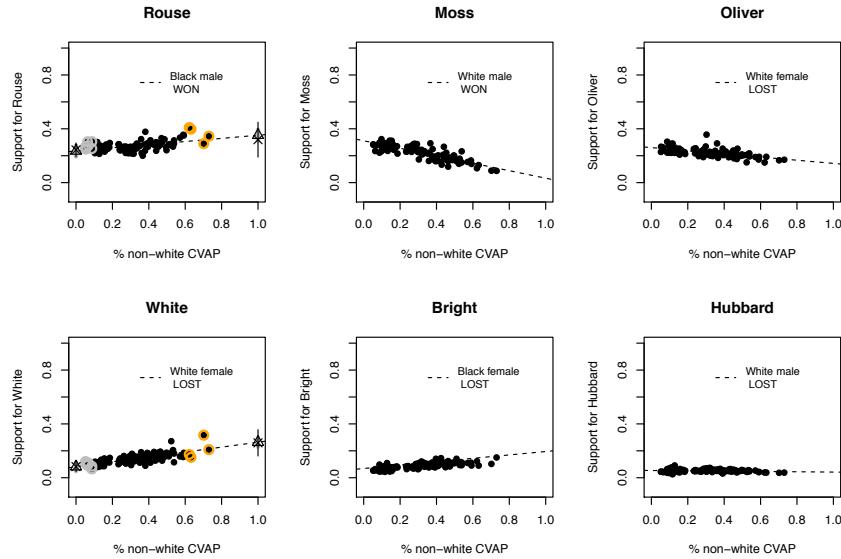


* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 2: The 2018 election for the Centerville seat provides evidence that all minority voters formed a coalition in support of Ms. Sabrina Wooten and against Mr. Eric Wray II (both of whom were minority candidates). Election results also show that Ms. Wooten benefited from crossover support from white voters. Ms. Wooten was the clear candidate of choice for black and other minority voters. While white voters did not support Ms. Wooten at the level of minority voters, they did not vote as a bloc in opposition to her. In fact, Ms. Wooten earned more support from white voters than any other minority candidate between 2008-2018; the 51% of white voters who supported her is more than three times the average support for minority candidates during this time period. Note a third candidate, Conrad Schesventer received very little support from all voters, and earned just 5.8% of the vote.

2018 Virginia Beach City Council Election
(At-large: 2 seats)



	Homogeneous precincts (○)	Ecological regression (△)	King's EI (×)
Aaron Rouse			
Black support (%)	34.4	41.2*	36.6
All minority support (%)**	36.0*	35.2*	31.8
White support (%)	27.6	23.5	24.4
Linda Bright			
Black support (%)	11.4*	19.5*	23.1*
All minority support (%)**	11.6*	16.0*	16.5*
White support (%)	6.2	5.9	5.7

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 3: The 2018 at-large election provides mixed evidence of coalitional voting, minority cohesion, and oppositional white voting. Aaron Rouse (black male) and Allison White (white female) were the candidates of choice for all minority voters, who split their votes between the two candidates. Mr. Rouse won a seat with the most votes due to crossover support from white voters. Ms. White came in a distant fourth (of six candidates) due to opposition voting by white voters. John Moss, an incumbent, narrowly defeated Dee Oliver for the second seat. Linda Bright (black female) was not the most preferred candidate among minority voters, yet her support was strong enough to be in the running; her support among minority voters was stronger than Mr. Moss's overall support but less than estimated minority support for Ms. White. Ms. Bright faced strong oppositional voting among white voters and came in 5th of six candidates.

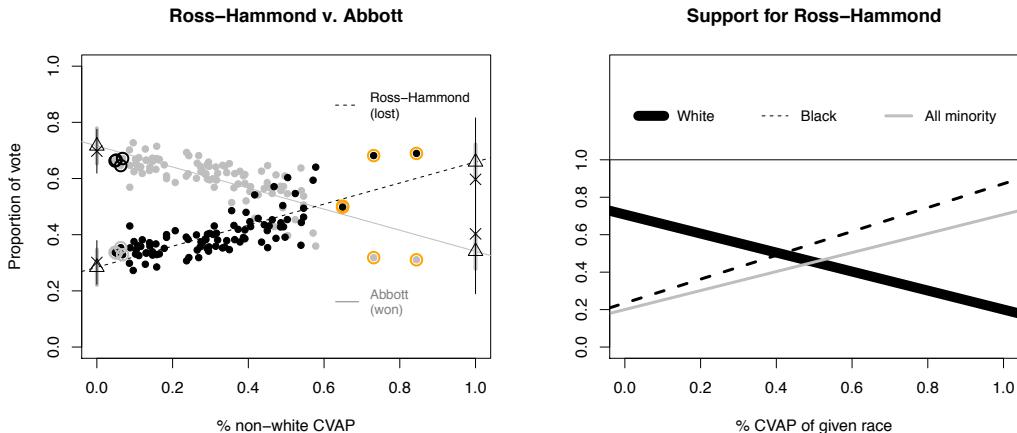
2018 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote	HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
At-large	Rouse	26.7	Black	34.4	41.2*	36.6	✓	✓
			All Minority	36.0*	35.2*	31.8		
			White	27.6	23.5	24.4		
	Moss [†]	22.6	Black	10.2*	0.0*	0.4*	✓	✓
			All Minority	10.3*	3.3*	3.9*		
			White	26.6	31.1	30.8		
Centerville	Oliver	22.5	Black	17.6	9.1	7.4	✓	✓
			All Minority	16.9	14.3	14.8		
			White	25.5	26.0	25.9		
	White	13.7	Black	22.6*	34.8*	36.3*	✓	✓
			All Minority	21.3*	26.4*	26.1*		
			White	9.6	8.2	8.3		
	Bright	8.8	Black	11.4*	19.5*	23.1*	✓	✓
			All Minority	11.6*	16.0*	16.5*		
			White	6.2	5.9	5.7		
	Hubbard	5.1	Black	3.8	4.2	2.7	✓	✓
			All Minority	3.8	4.6	4.0		
			White	4.6	5.3	5.8		
	Wooten	62.1	Black	75.7*	99.5*	95.7*	✓	✓
			All Minority	75.0*	85.4*	85.5*		
			White	56.5	51.1	51.0		
	Wray	32.1	Black	19.7*	0.0*	1.1*	✓	✓
			All Minority	20.4*	8.5*	8.5*		
			White	38.0	43.3	43.4		
	Schlesventer	5.8	Black	4.6	5.8	7.8	✓	✓
			All Minority	5.0	6.2	6.2		
			White	5.6	5.7	5.7		

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

2016 Virginia Beach City Council Election
(Kempsville)



Amelia Ross-Hammond

	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Black support (%)	62.3*	83.3*	76.7*
All minority support (%)**	62.1*	65.9*	59.9*
White support (%)	33.9	28.4	30.3

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 4: The 2016 election for the Kempsville seat provides strong evidence of coalitional racially polarized voting. Amelia Ross-Hammond was just the third black member of the Virginia Beach City Council in its fifty-five year history and was seeking re-election after her first term. She was strongly supported by black and other minority voters. As a coalition, estimated support among racial minority voters for Ms. Ross-Hammond (59.9%) was higher than the overall vote total of her opponent Jessica Abbott (59.4%). Despite incumbency and strong support among a cohesive coalition of minority voters, Ms. Ross-Hammond was defeated due to white bloc voting in opposition to her candidacy. This pattern is plotted in the right panel. The best-fit lines from ecological regressions predicting support among black and other minority voters are positively sloped, illustrating that as the minority population increases in a precinct so does support for Ms. Ross-Hammond. On the other hand, the negatively sloped thick line illustrates that white support for Ms. Ross-Hammond cuts against the voting preferences of the coalition of minority voters.

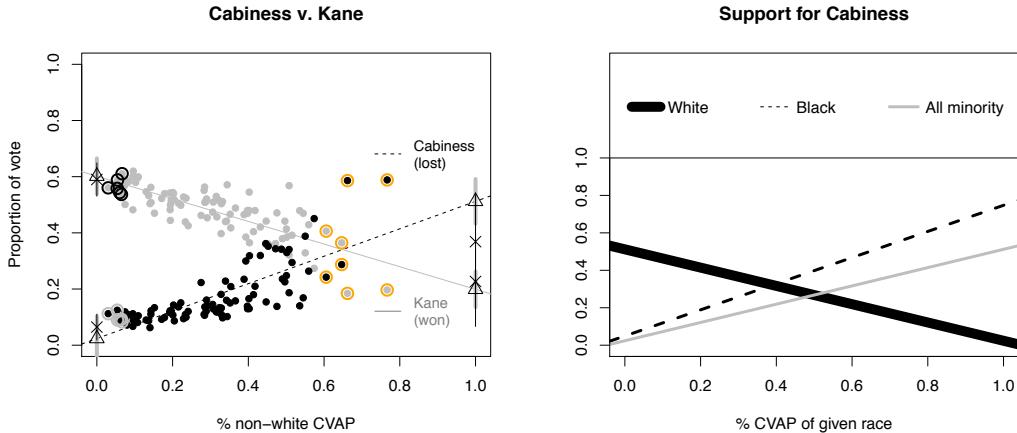
2016 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote		HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
Mayor	Sessoms [†]	54.3	Black All Minority White	64.1 63.7* 52.5	73.3* 66.1* 48.2	75.4* 66.1* 47.1	✓	✓ ✓	
	Kowalewitch	19.5	Black All Minority White	12.1* 11.9* 24.8	0.0* 5.8* 27.0	1.4* 4.8* 27.4			
	Weeks	18.6	Black All Minority White	10.1* 10.8* 18.8	4.8* 10.1* 21.8	3.6* 10.9* 21.8			
Kempsville	Furman	7.6	Black All Minority White	13.7* 13.6* 3.9	23.7* 18.1* 3.0	26.5* 18.1* 3.0			
	Abbott	59.4	Black All Minority White	37.7* 37.9 66.1	16.7* 34.1 71.6	23.1* 40.6 69.7	✓		
	Ross-Hammond [†]	40.6	Black All Minority White	62.3* 62.1* 33.9	83.3* 65.9* 28.4	76.8* 59.9* 30.1		✓ ✓	✓

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

2014 Virginia Beach City Council Election
(Rose Hall)



James Cabiness

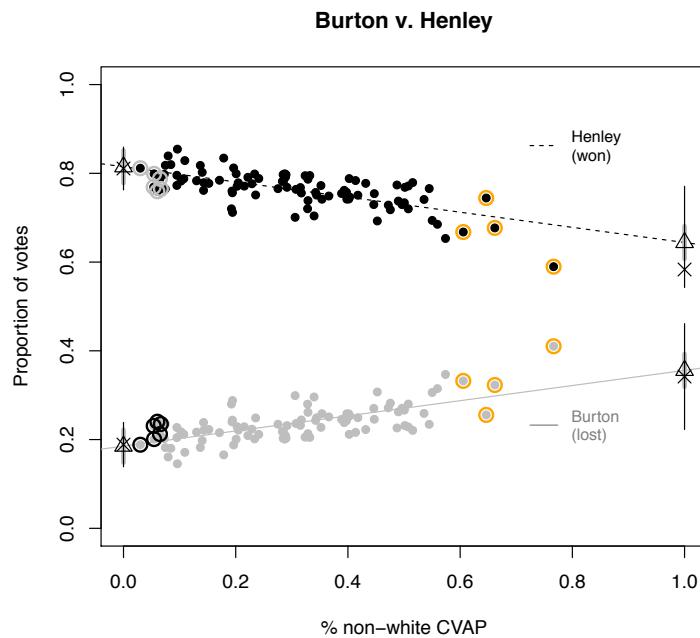
	Homogeneous precincts (○)	Ecological regression (△)	King's EI (×)
Black support (%)	48.7	74.7*	51.7*
All minority support (%)**	42.6*	51.2*	37.0*
White support (%)	9.9	2.4	6.4

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 5: The 2014 special election for the Rose Hall seat provides evidence of coalitional racially polarized voting. Mr. James Cabiness was the clear candidate of choice for black and other minority voters yet he earned the least amount of votes among four candidates and was easily defeated by white candidate Shannon Kane. Mr. Cabiness faced two challenges that proved too difficult to overcome. The first was strong opposition among white voters, whose support is estimated in the single digits making Mr. James the least popular of all candidates among white voters. As the right panel illustrates, support for Mr. Cabiness among white voters cuts strongly against his estimated support among minority voters. The second challenge was campaign finance: Mr. Cabiness was outspent by Ms. Kane \$122,000 to \$3,500. (See the Virginia Public Access Project at: <https://www.vpap.org/candidates/190492-james-cabiness/>).

2014 Virginia Beach City Council Election
(Princess Anne)



Pieri Burton

	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Black support (%)	33.0	42.3*	41.8
All minority support (%)**	33.9	35.6*	34.3
White support (%)	21.8	18.5	18.9

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 6: The 2014 election for the Princess Anne seat provides little evidence of minority coalitional voting, coethnic vote cohesion, or oppositional white bloc voting. Incumbent Barbara Henley, a white female, decisively retained her seat against a challenge from Pieri Burton, a black male. Support for Ms. Henley was strong among white voters (80-20%) as well as black (58-42%) and other minority voters (65-35%).

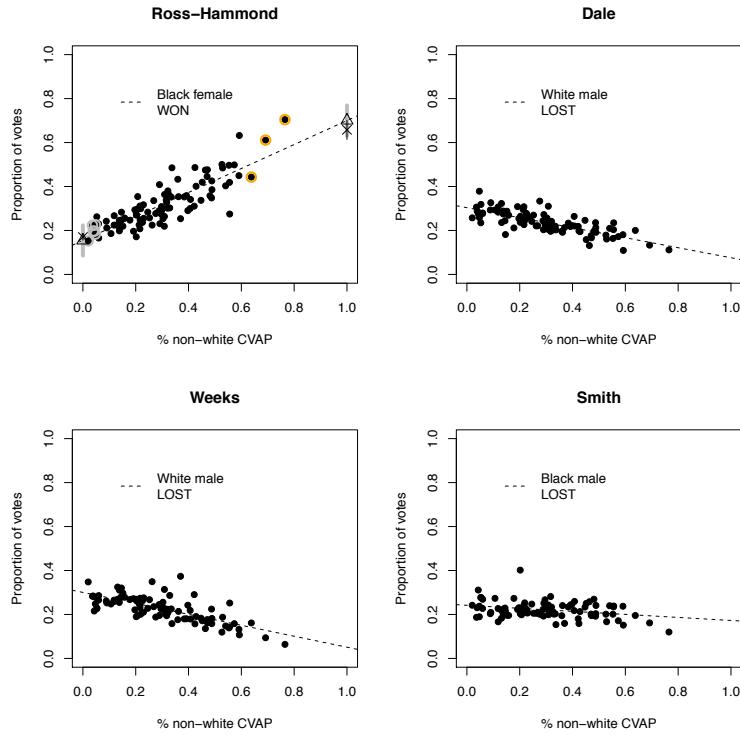
2014 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote	HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
At-large	Davenport	32.7	Black All Minority White	51.5 46.9 32.1	58.2* 45.9* 28.1	48.5* 39.5* 30.0	✓	
	Moss [†]	32.6	Black All Minority White	22.5* 24.8* 35.4	14.0* 21.3* 36.6	14.4* 21.7* 36.8	✓	
	Martin	26.7	Black All Minority White	15.2 17.0* 27.2	8.7* 17.1* 30.0	11.2* 19.0* 29.3		
	Furman	8.1	Black All Minority White	10.9* 11.3* 5.3	19.1* 15.7* 5.3	23.4* 16.4* 5.1		
Rose Hall (special)	Kane	48.3	Black All Minority White	24.9* 19.7* 56.6	1.5* 19.9* 60.2	8.1* 22.7* 59.1	✓	
	Johnston	17.5	Black All Minority White	10.2* 11.3* 18.0	5.4* 10.3* 20.3	3.8* 10.2 20.8		
	Browder	17.3	Black All Minority White	16.2 17.4 15.5	18.4 18.6 17.1	24.3 19.9 16.6		
	Cabiness	16.8	Black All Minority White	48.7 42.6* 9.9	74.7* 51.2* 2.4	51.7* 37.0* 6.4	✓ ✓	✓
Princess Anne	Henley [†]	76.7	Black All Minority White	67.0 67.0* 78.2	57.7* 64.4* 81.5	58.0* 65.5* 81.1	✓	✓
	Burton	23.3	Black All Minority White	33.0 33.0* 21.8	42.3* 35.6* 18.5	41.8* 34.3* 18.9		

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

2012 Virginia Beach City Council Election
(Kempsville)



Amelia Ross-Hammond

	Homogeneous precincts (○)	Ecological regression (△)	King's EI (×)
Black support (%)	58.6*	90.2*	86.9*
All minority support (%)**	55.6*	70.0*	65.7*
White support (%)	20.1	15.4	17.0

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 7: The 2012 election for the Kempsville seat provides strong evidence of minority cohesion as support among black and other minority voters was overwhelming in favor of black candidate Ms. Ross-Hammond. Voting patterns also indicate that Ms. Ross-Hammond was the least popular of all four candidates among white voters. However, white voters split their support between Ms. Ross-Hammond's opponents and the result was a victory for Ms. Ross-Hammond, who became just the third black member of the Virginia Beach City Council in the city's history.

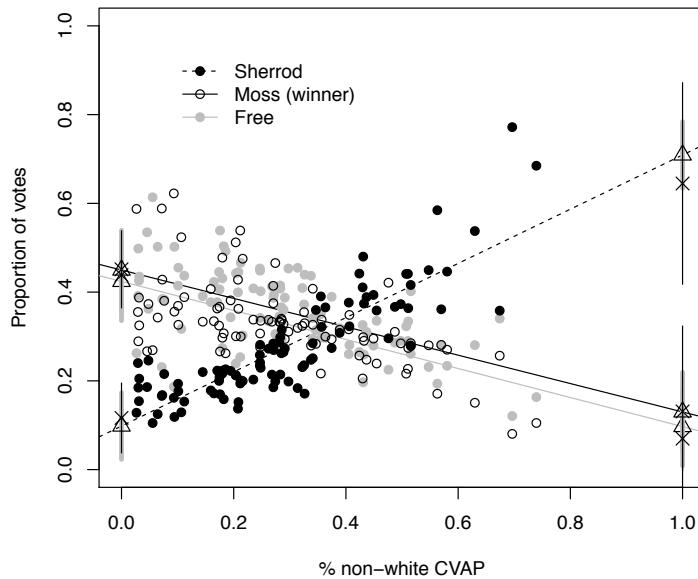
2012 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote		HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
Kempsville	Ross-Hammond	32.2	Black	58.6*	90.2*	86.9*		✓	
			All Minority	55.6*	70.0*	65.7*		✓	
			White	20.1	15.4	17.0	✓		
	Dale	23.2	Black	14.8*	0.0*	2.1*			
	Weeks	22.5	All Minority	15.1*	7.6*	7.6*			
			White	28.8	30.4	30.2			
	Smith	22.1	Black	10.6*	0.0*	0.3*			
			All Minority	12.0*	5.1*	5.7*			
			White	26.6	30.0	29.8			

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

2011 Virginia Beach City Council Election
(At-large special)



Prescott Sherrod

	Homogeneous precincts (○)	Ecological regression (△)	King's EI (×)
Black support (%)	60.5	92.4*	87.0*
All minority support (%)**	56.8*	70.9*	64.8*
White support (%)	17.5	9.8	11.5

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 8: The 2011 at-large special election provides evidence of racially polarized voting between whites and all minority voters. Mr. Prescott Sherrod, a black male, was appointed to fill this vacant seat six months before the election when the prior incumbent moved out of state. As the new short-term incumbent, Mr. Sherrod had very strong support among black and other minority voters. Support for Mr. Sherrod among white voters was so low that he was ultimately defeated.

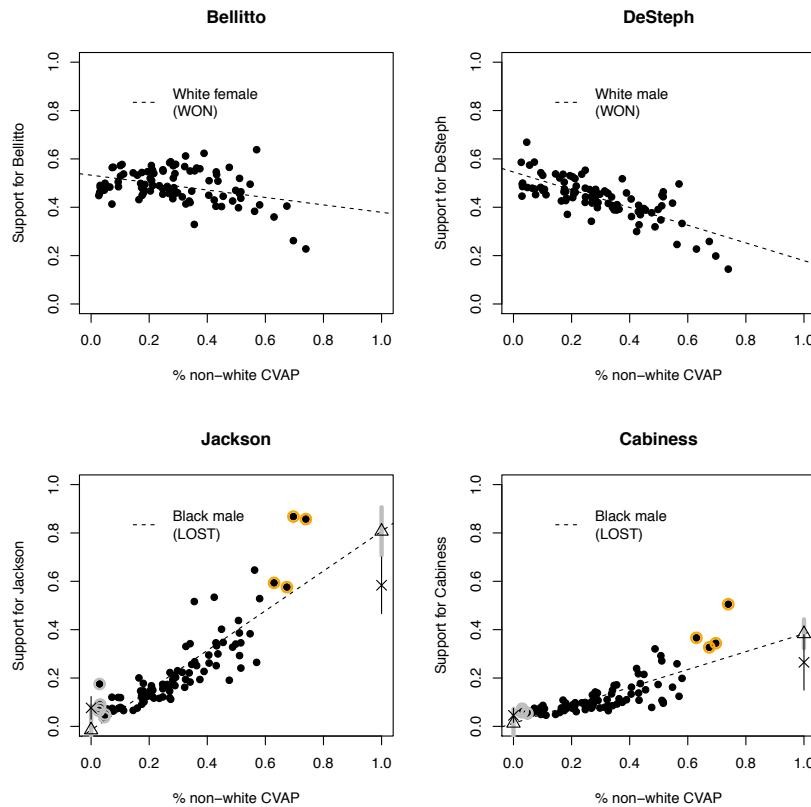
2011 Virginia Beach City Council Special Election
(All Probative Races)

	Candidate (incumbent [†])	Overall vote	HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
At-large	Moss	37.0	Black	20.8*	2.8*	5.9*		
			All Minority	22.6*	13.0*	12.8*	✓	
			White	44.7	45.0	45.2		
At-large	Free	33.2	Black	14.7*	0.0*	0.4*		
			All Minority	14.8 *	9.7*	6.7*		
			White	35.5	42.4	43.7		
At-large	Sherrod [†]	25.9	Black	60.5	92.4*	87.0*	✓	✓
			All Minority	58.8*	70.9*	64.8*	✓	✓
			White	17.5	9.8	11.5		

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

Note: Candidate Mike Makela dropped out of the race two months before the election (on September 30, 2011). His name appeared on the ballot and received 3.5% of the vote.

2010 Virginia Beach City Council Election
(At-large: 2 seats)



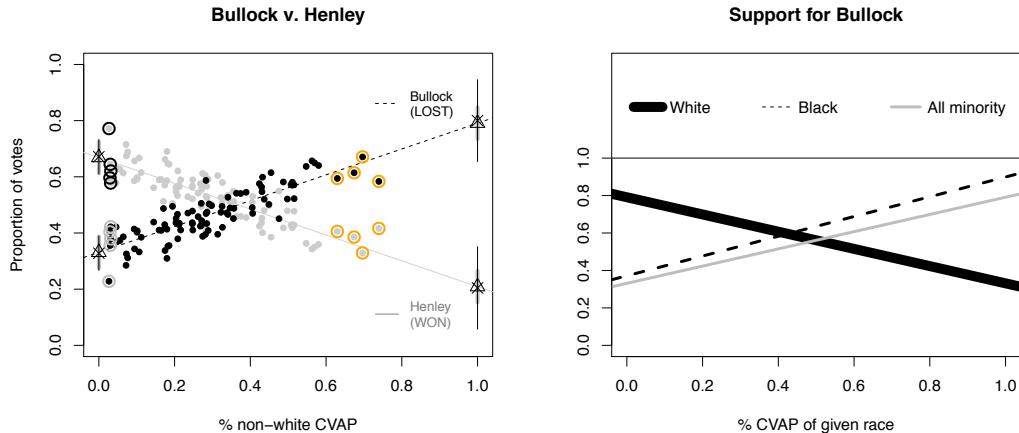
	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Andrew Jackson			
Black support (%)	76.7*	100.0*	85.6*
All minority support (%)**	72.4*	80.7*	58.2*
White support (%)	8.0	0.0	7.7
James Cabiness			
Black support (%)	39.2*	54.2*	38.5*
All minority support (%)**	38.6*	38.3*	26.7*
White support (%)	6.1	1.3	4.5

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 9. The 2010 at-large election provides strong evidence of coalitional voting, minority vote cohesion, and oppositional white bloc voting. Andrew Jackson, a black male, was the clear candidate of choice for black and other minority voters. However, oppositional white bloc voting was sufficient to prevent his election. There were two at-large seats and minority voters were split in their second-choice candidate. Black voters were equally supportive of James Cabiness, a black male who earned the fewest votes of all seven candidates, and Rita Bellitto, a white female who earned the most votes of all candidates. Importantly, white support was very strong for Bellitto ($> 50\%$ in a seven-candidate race) and non-existent for Cabiness ($< 5\%$). In the end, the two candidates preferred by white voters won while two of the three candidates preferred by minority voters (both of them black) came in last and second-to-last in the election.

2010 Virginia Beach City Council Election
(Princess Anne)



Tanya Bullock

	Homogeneous precincts (\odot)	Ecological regression (Δ)	King's EI (\times)
Black support (%)	62.3*	89.9*	89.2*
All minority support (%)**	61.6*	79.1*	79.9*
White support (%)	37.1	33.1	32.9

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 10: The 2010 election for the Princess Anne seat provides strong evidence of coalitional voting, minority vote cohesion, and oppositional white bloc voting. Tanya Bullock, a black female, was defeated despite overwhelming support among black and other minority voters (80%). White voters strongly preferred the incumbent Barbara Henley, a white female, by a margin of 2-to-1. The voting pattern in the right panel illustrates that as the minority population increases, support for Bullock substantially increases among all minority voters, while white voter support cuts strongly in the opposite direction.

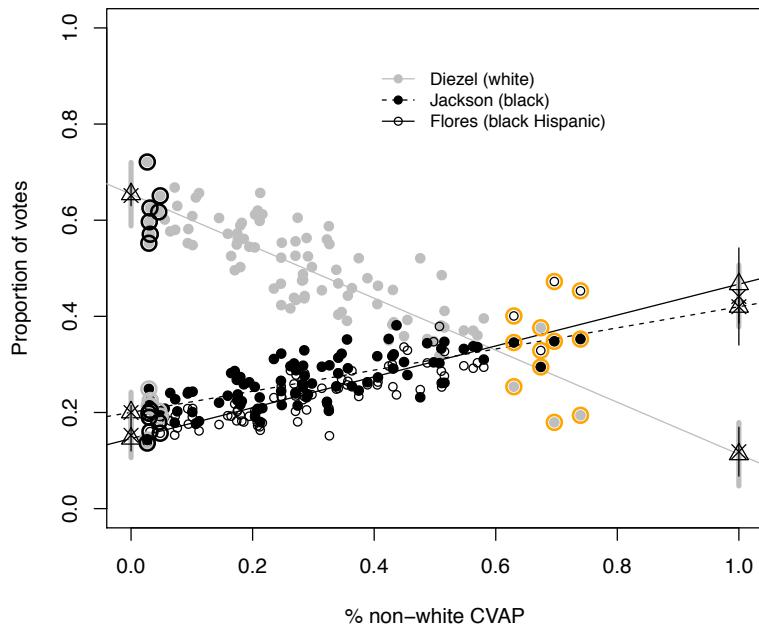
2010 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote	HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
At-large	Bellitto	49.4	Black	29.8	26.3	38.0		
			All Minority	31.4	37.9	44.9	✓	✓
			White	47.5	53.3	51.3		
	DeSteph [†]	44.8	Black	20.0*	3.1*	4.9*		
			All Minority	20.7	17.9	20.1	✓	
			White	52.4	54.6	53.9		
Bayside	Moss	30.1	Black	16.4*	7.1*	7.2*		
			All Minority	17.1	14.6	15.8		
			White	33.6	35.8	35.5		
	Erb	22.5	Black	10.1*	4.6*	0.3*		
			All Minority	11.2	10.6	11.9		
			White	23.6	27.7	27.7		
Princess Anne	Redmond	21.4	Black	7.5*	0.0*	1.8*		
			All Minority	8.6	0.0	0.1		
			White	28.7	28.8	27.6		
	Jackson	20.3	Black	76.7*	100.0*	85.6*	✓	✓
			All Minority	72.4*	80.7*	58.2*	✓	✓
			White	8.0	0.0	7.5		
Bayside	Cabiness	11.3	Black	39.2*	54.2*	38.5*		
			All Minority	38.6	38.3	26.7		
			White	6.1	1.3	4.5		
	Jones [†]	64.7	Black	63.2*	53.8*	55.2	✓	✓
			All Minority	63.1	56.2	56.6		
			White	68.9	67.5	67.3		
Princess Anne	Furman	35.3	Black	36.8	46.2	44.2		
			All Minority	36.9	43.8	43.7		
			White	31.1	32.5	32.8		
	Henley [†]	54.4	Black	37.7*	10.1*	11.0*		
			All Minority	38.4	10.1	20.2	✓	
			White	62.9	66.9	67.1		
Princess Anne	Bullock	45.6	Black	62.3*	89.9*	89.2*	✓	✓
			All Minority	61.6	79.1	79.9	✓	✓
			White	37.1	33.1	32.9		

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

2008 Virginia Beach City Council Election
(Kempsville)



	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Andrew Jackson			
Black support (%)	33.2*	48.8*	50.5*
All minority support (%)**	33.5*	42.0*	42.2*
White support (%)	21.0	20.0	19.8
Jose Flores			
Black support (%)	41.8*	57.1*	56.5*
All minority support (%)**	41.4*	46.7*	44.2*
White support (%)	17.8	14.6	15.3

* Estimated minority support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 11: The 2008 election for the Kempsville provides evidence of minority cohesion, and oppositional white bloc voting. The race featured three candidates: Harry Diezel (white male incumbent), Andrew Jackson (black challenger), and Jose Flores (black Hispanic challenger). Black voters did not support the white incumbent Diezel, but almost unanimously supported Jackson or Flores. White voters, on the other hand, strongly supported Diezel. Jackson won 27% and Flores won 24% of the vote for a combined total of 51%.

2008 Virginia Beach City Council Election

(All Probative Races)

	Candidate (incumbent [†])	Overall vote		HP	ER	EI	Won election?	Minority cand. of choice	Minority % ↑ winner?
At-large	Wilson [†]	44.1	Black	20.8*	0.0*	0.9*			
			All Minority	22.0	7.0	8.3	✓		
			White	57.1	59.3	58.8			
	Allen	34.6	Black	59.4*	87.2*	86.3*		✓	✓
			All Minority	58.7	70.8	70.5		✓	✓
Kempsville	Strausbaugh	9.4	Black	5.3	4.5	2.8*			
			All Minority	5.5	6.7	7.6			
			White	8.7	10.5	12.2			
	Shuler	7.6	Black	9.9	11.0*	6.3*			
			All Minority	9.4	10.0*	10.7*			
Kempsville	Teator	4.2	Black	4.7	5.9	6.6			
			All Minority	4.4	5.5	5.5			
			White	3.3	3.5	3.5			
	Diezel [†]	48.7	Black	25.0*	0.0*	3.7*			
			All Minority	25.1	11.3	12.3	✓		
			White	61.9	65.4	65.0			
Kempsville	Jackson	27.2	Black	33.2*	48.8*	50.5*			
			All Minority	33.5	42.0	42.2		✓	
	Flores	24.0	White	21.0	20.0	19.8			
			Black	41.8*	57.1*	56.5*		✓	✓
			All Minority	22.0	7.0	8.3			
			White	17.8	14.6	15.3			

* $p < 0.05$ (minority vs. white support). Candidates of color highlighted by red text.

Racial Polarization in Federal Elections

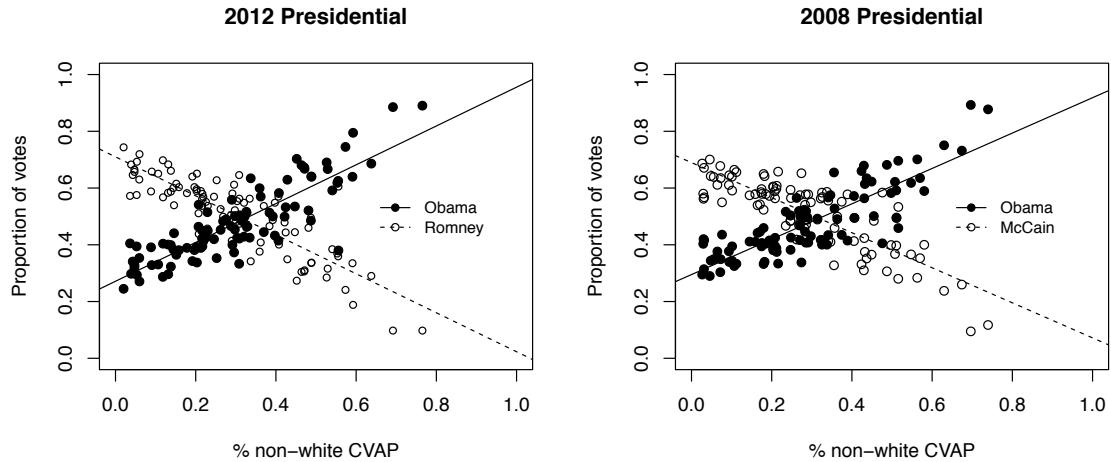


Figure 12: Presidential election returns for precincts in Virginia Beach. Minority voters strongly preferred Obama over both John McCain and Mitt Romney, with an estimated 90% support. White voters strongly preferred McCain and Romney (65% support) over Obama (35% support). Overall, Virginia Beach went for McCain in 2008 (49.7% to 48.9%) and for Romney in 2012 (50.3% to 47.8%).

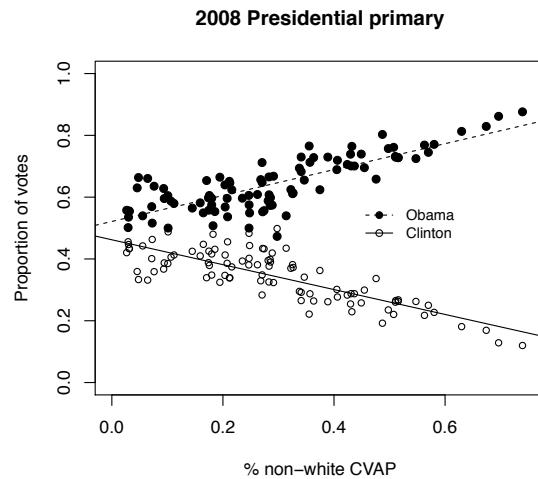
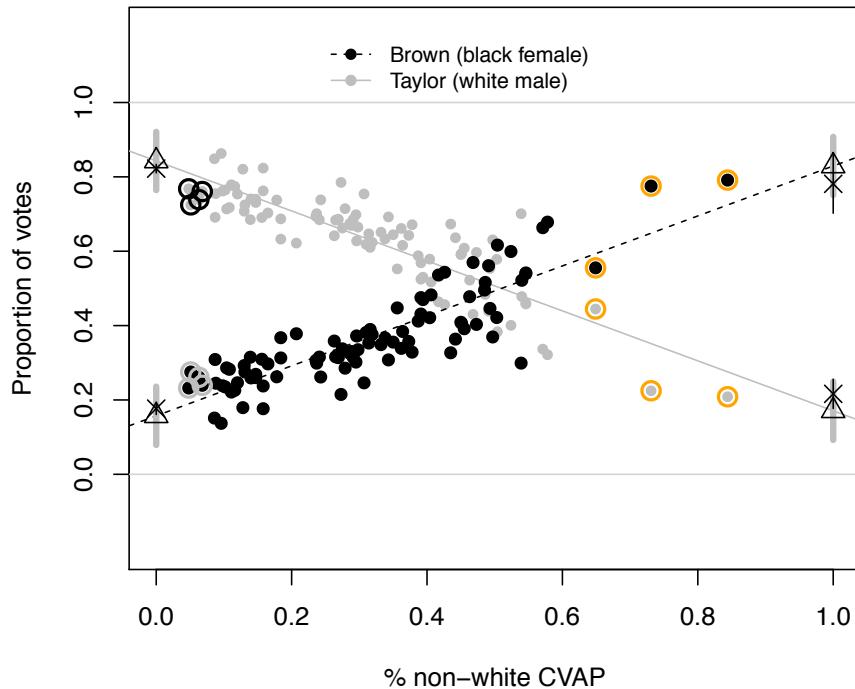


Figure 13: Precinct-level election returns for the February 2008 presidential primary. Virginia's primary elections are open to all voters, so election returns are not necessarily restricted to Democratic voters. All voters in Virginia Beach preferred Obama to Clinton (he captured 65% of the vote), but support for Obama was much stronger among minority voters. In short, even controlling for party label there is evidence of racially polarized voting in Virginia Beach.

2016 Congressional Election
(Virginia Beach precincts)



Shaun Brown

	Homogeneous precincts (○)	Ecological regression (Δ)	King's EI (×)
Black support (%)	70.7*	100.0*	94.9*
All minority support (%)**	70.7*	82.9*	78.1*
White support (%)	25.2	15.7	17.7

* Estimated black support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 14: The 2016 congressional election provides evidence of racial coalitional voting, minority cohesion, and oppositional white bloc voting. Minority voters strongly preferred Shaun Brown (black female) over Scott Taylor (white male). On the other hand white voters strongly supported Taylor over Brown. Despite being the candidate of choice for black and other minority voters in Virginia Beach, Brown earned just 36.6% of the city's overall votes compared to 63.3% for Taylor.

Analysis of Alternative Districts

In addition to analyzing the extent of racially polarized voting in Virginia Beach elections, I have been asked to evaluate the potential ameliorative effects of two possible voting districts. Figure 15 shows a map of Virginia Beach. The gray shaded areas are individual voting precincts and the highlighted regions are two potential majority-minority districts. A breakdown of each district's citizen voting age population (CVAP) is presented in Table 5. The question is whether minority voters in Virginia Beach will be more able to elect candidates of their choice in a district-based election that included these two districts. The short answer is yes.

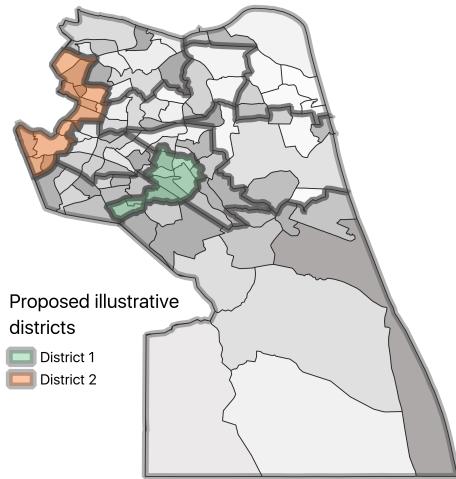


Figure 15: Two potential majority-minority districts in Virginia Beach. Gray shaded areas are voting precincts.

As I illustrate below, minority voters will be more likely to elect candidates of their choice in these two districts not just because of the sheer number of minority voters in each district, but because voting in these districts is less likely to be racially polarized. This means that black and other minority candidates are more likely to win in these districts, and are more likely to benefit from cross-over support from white voters. I arrive at this finding by merging voting data from previous elections to the boundaries of each new districts. There are 13 precincts (or parts of precincts) in the District 1 and nine precincts (or parts of precincts) in District 2.

	At-large	District 1	District 2
White CVAP	67.2	46.13	47.38
Nonwhite CVAP	32.8	50.03	50.04
Black	18.5	30.7	39.05
Hispanic	5.9	7.31	6.81
Asian	5.4	11.98	4.17

Table 5: Citizen voting age population statistics for two proposed majority-minority districts, compared to the at-large citywide population. Source: 2016 American Community Survey.

In Figure 16 I plot support for each of the six minority candidates of choice that lost between 2008-2016 and a seventh candidate that ran against the black candidate of choice (and lost) in 2010. Much like the ecological regression models presented earlier, I plot voter support on the y-axis and the percent of minority CVAP on the x-axis. Because there are so few precincts in these districts, I use a locally weighted smoother “loess” line that is flexible and represents how the data are actually structured. The loess illustrates the extent to which the homogeneous precincts (which have more leverage given the small number of observations) drive any estimates of racially polarized voting. The gray regions are 95% confidence intervals. The plots that are shaded in red signal that the candidate would have won an election in these new districts based on the same voting patterns of their original elections. I present the full dataset of estimated election outcomes in Table 6 on the next page.

There are three important takeaways from Figure 16. First, although the hypothetical elections of Jackson (2010) and Sherrod (2011) would see significant racially polarized voting in District 2, the election preferences of white and minority voters is statistically indistinguishable or not substantively significant for all other hypothetical elections in both proposed districts. The election returns in Table 6 show how voting preferences between white and minority voters would shrink considerably in the two new districts.

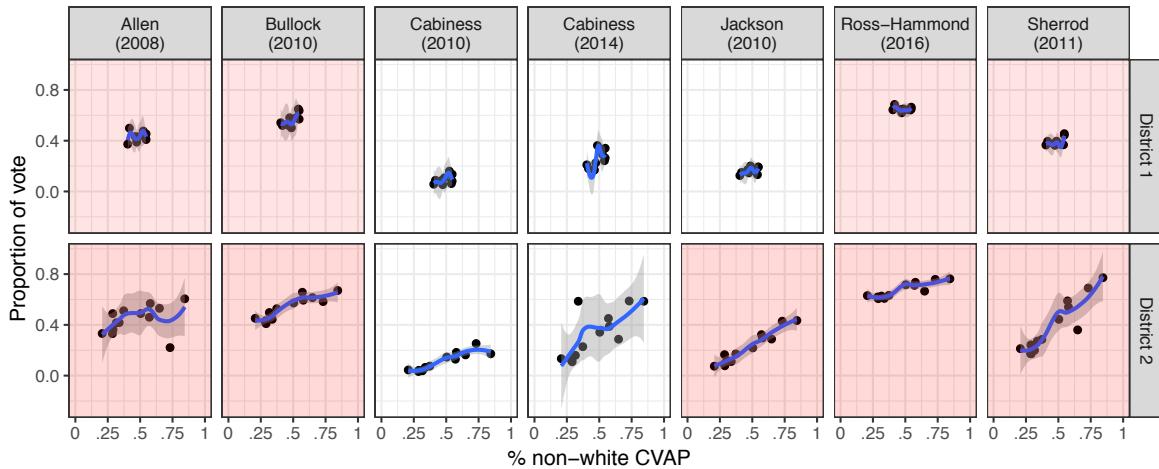


Figure 16: Precinct-level election returns for minority candidates of choice that lost their election between 2008-2016. (Mr. James Cabiness was not the candidate of choice in 2010 but competed with Mr. Andrew Jackson who was). The blue lines are locally weighted smoothing “loess” lines that do not impose a linear relationship on the data. The gray shaded regions are 95% confidence intervals. Plots that are shaded in red signal that the candidate would have won an election in these districts based on the same voting patterns of their original election.

Second, the distribution of minority voters varies considerably between the two proposed districts. In District 2 the minority CVAP ranges from 20.7% to 84.4% of precinct population. This is evidence that there is some neighborhood segregation. In District 1, on the other hand, the distribution is much more uniform with a range of 40.4-54.6%. Minority voters in District 1 are much more integrated with white voters throughout the entire district.

Year	Candidate	At-large		District 1		District 2	
		Total votes	Win election?	Total votes	Win election?	Total votes	Win election?
2016	Abbott	59.4	✓	356		32.4	
	Ross-Hammond*	40.6		64.4	✓	67.6	✓
2014	Kane	48.3	✓	41.8	✓	35.2	✓
	Johnston	17.5		14.8		15.4	
	Browder	17.3		18.5		17.6	
	Cabinness*	16.8		25.0		31.9	
2011	Moss	37.0	✓	29.4		33.7	
	Free	33.2		27.9		23.8	
	Sherrod*	25.9		39.1	✓	38.6	✓
2010 AL	Bellitto	49.4	✓	25.1	✓	20.0	✓
	DeSteph	44.8	✓	20.8	✓	17.1	
	Moss	30.1		12.0		13.7	
	Erb	22.5		9.0		10.2	
	Redmond	21.4		7.8		7.2	
	Jackson*	20.3		16.7		21.1	✓
	Cabinness*	11.3		8.7		10.9	
2010 PA	Henley	54.4	✓	42.1		46.8	
	Bullock*	45.6		57.9	✓	53.2	✓
2008 AL	Wilson	44.1	✓	34.5		36.8	
	Allen	34.6		43.2	✓	43.5	✓

Table 6: Estimated vote shares for candidates in races that featured losing minority candidates of choice. Actual election returns are reported "At-large" total votes. Shaded rows indicate the black candidate of choice. * indicates minority candidate.

Qualifications

I am Professor of Law and Public Policy at the University of Connecticut with a joint appointment in the School of Law and the Department of Public Policy. During 2018-2019, when I did much of my work, I was a Visiting Professor at the Harris School of Public Policy Studies at the University of Chicago. From 2016-2017, I was a Visiting Fellow at the Center for the Study of American Politics at Yale University.

I received my Ph.D. in Jurisprudence and Social Policy from the University of California, Berkeley in 2013. I also earned a J.D. from UC Berkeley in 2011, and a Master of Public Policy degree from UC Berkeley in 2008. In addition to my formal graduate training in statistics and empirical methods I also participated in the Empirical Implications of Theoretical Models Conference at UC Berkeley (2010) and I attended the Workshop on Research Design for Causal Inference at Northwestern University (2012). I have also worked as a law clerk at the Lawyers' Committee for Civil Rights of the San Francisco Bay Area (2011), a researcher for the Pew Center on the States' Military and Overseas Voting Reform Project (2011) and a researcher for the Early Voting Information Center (2009-2010).

My expertise is the empirical analysis of public law, with an emphasis on campaign finance and voting rights. My scholarship has been published in the peer-reviewed *Election Law Journal* and *Journal of Law & Courts* as well as in the *Columbia Law Review*, *California Law Review*, *Indiana Law Journal*, *University of Illinois Law Review*, and the *U.C. Irvine Law Review*. I have presented my research at the Conference on Empirical Legal Studies, the Public Economy and Public Law Conference, the American Political Science Association annual meeting, the American Law & Economics Association annual meeting, and other local, state, and national academic conferences.

I teach Constitutional Law (graduate and undergraduate), Election Law, Introduction to Public Policy and Administration, and a seminar on The Supreme Court and Public Policy. My full curriculum vitae is appended to this report.

I will be compensated by the Campaign Legal Center for my work in this case at a rate of \$250 per hour.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Date: July 15, 2019



Douglas M. Spencer, Ph.D.
Professor of Law & Public Policy
University of Connecticut

Appendices

A. Technical Note on Merging Census and Election Data

B. RPV Analysis for Elections with George Furman

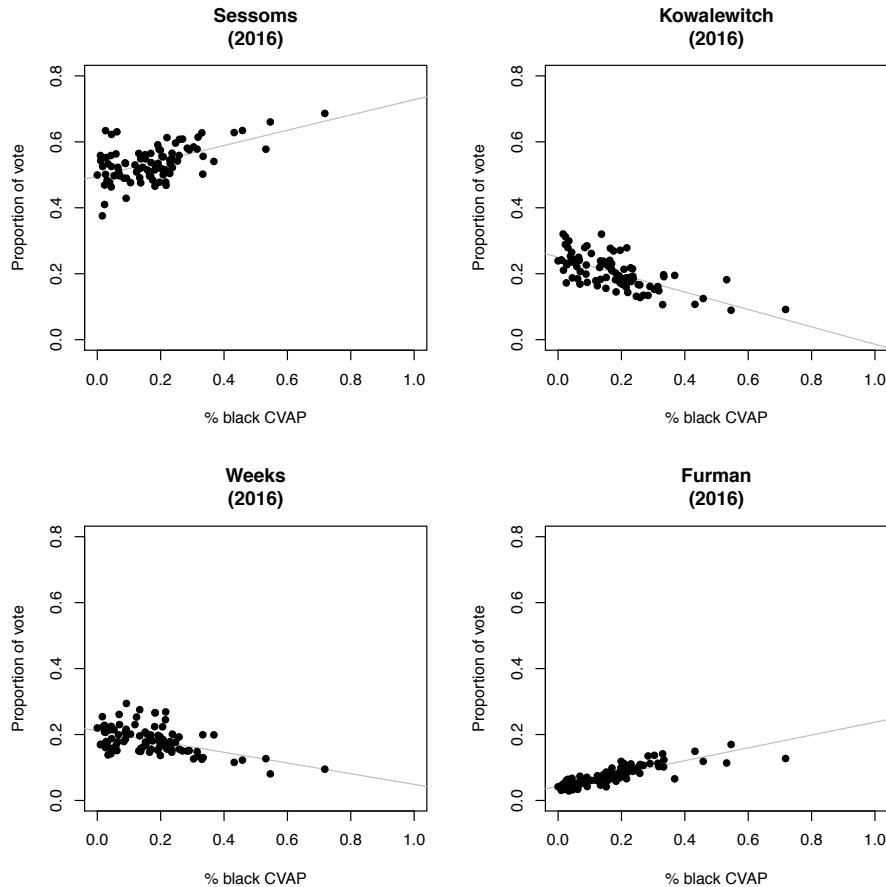
C. Curriculum Vitae

A. Technical Note: Merging Census and Elections Data

One of the most challenging aspects of racially polarized voting analysis is the geographic mismatch of available demographic and political data. Demographic information, such as the size of citizen voting age population (CVAP), are reported at the level of census blocks. Election returns are reported at the level of voting district or precinct. Unfortunately, these two geographies do not perfectly overlap, so merging the data require some modeling choices. For my analysis, I performed a "spatial join" that aggregated data from census blocks in proportion to the area of each block within each district.¹¹ If a census block is completely within the boundaries of a voting precinct then the entire count of CVAP is added to that precinct's total. If a census block is split between two precincts—for example, 60% in one precinct and 40% in another precinct—then I assign 60% of the CVAP to the former and 40% of the CVAP to the latter. I outline the mechanics of the spatial join in the script file "vabeach_vtd.R".

¹¹For more information about various approaches to geographic spatial joins, see Brian Amos et al. *When Boundaries Collide: Constructing a National Database of Demographic and Voting Statistics*, 81 PUB. OPINION Q. 385 (2017).

B. RPV Analysis for Elections with George Furman



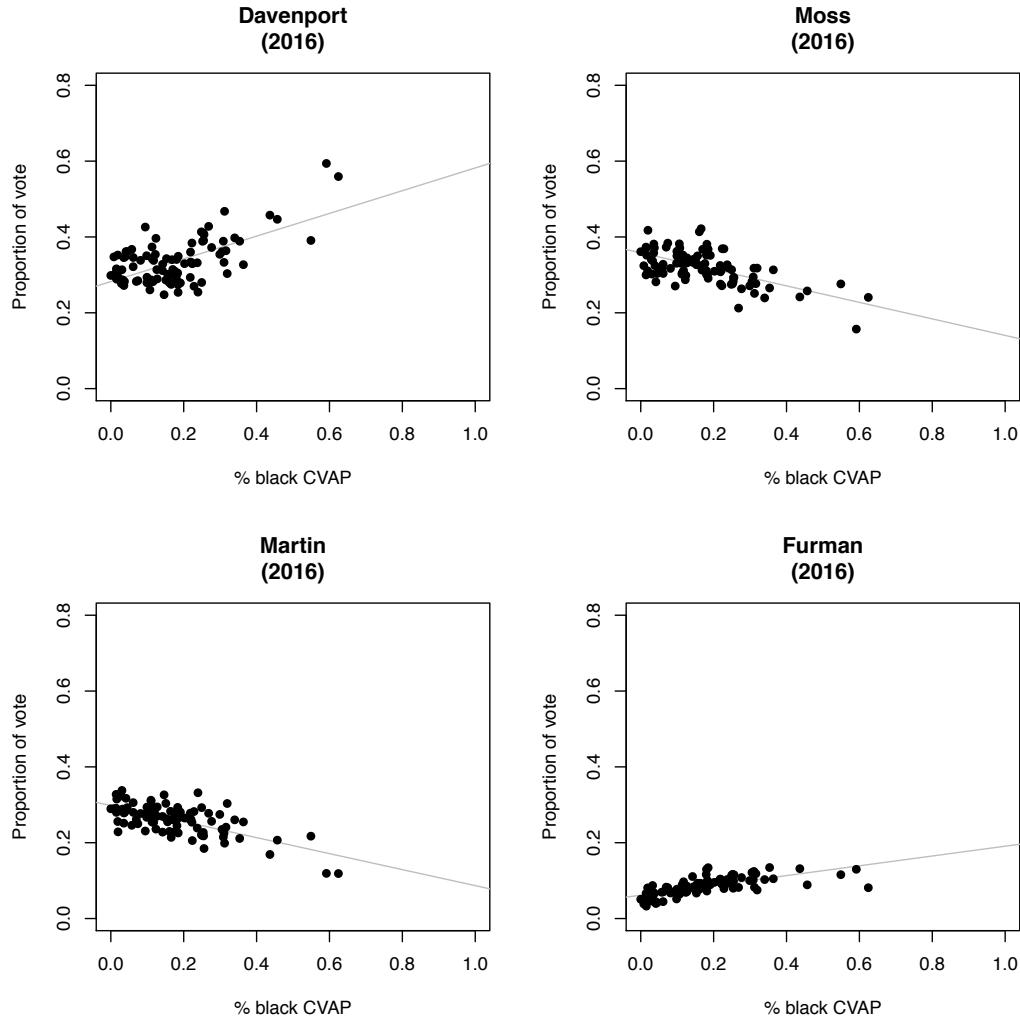
George Furman

	Homogeneous precincts (○)	Ecological regression (△)	Ecological inference (×)
Black support (%)	13.7*	23.7*	26.5*
All minority support (%)**	13.6*	18.1*	18.1*
White support (%)	3.9	3.0	3.0

* Estimated black support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 17: Estimated support for Will Sessoms for the 2016 mayoral seat. The race featured three white males and a black male, George Furman. Mr. Furman earned 7.6% of the vote and was not the minority candidate of choice. Support for Mr. Furman was less than 30%. Will Sessoms, who won with 54.3% of the vote was the preferred candidate among all groups of voters.



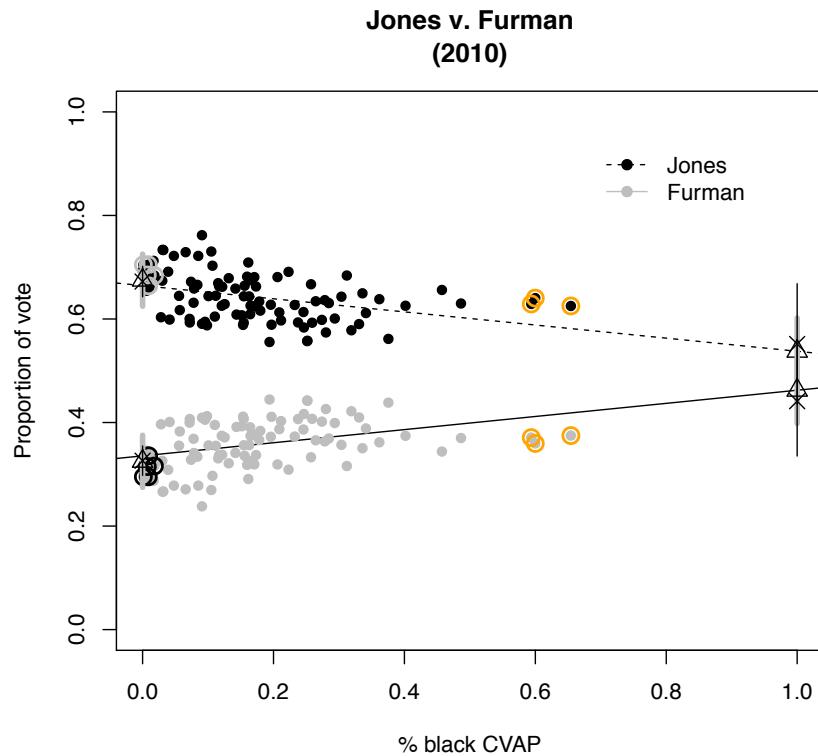
Ben Davenport

	Homogeneous precincts (○)	Ecological regression (△)	Ecological inference (×)
Black support (%)	51.5	58.2*	48.5*
All minority support (%)**	46.9	45.9*	39.5*
White support (%)	32.1	28.1	30.0

* Estimated black support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 18: Estimated support for candidates running for an at-large seat in 2014. The race was contested by three white men and one black male. Ben Davenport (a white male) was the minority candidate of choice and defeated the incumbent by just 194 votes out of more than 146,000 votes cast. Mr. Furman, a black male, earned 7.6% of the overall vote, with an estimated support among black voters of approximately 20%.



	Homogeneous precincts (○)	Ecological regression (Δ)	Ecological inference (×)
Louis Jones			
Black support (%)	63.2*	53.8*	55.2
All minority support (%)**	63.1	56.2	56.6
White support (%)	68.9	67.5	67.3
George Furman			
Black support (%)	36.8*	46.2*	45.5
All minority support (%)**	36.9	43.8	43.7
White support (%)	31.1	32.5	32.8

* Estimated black support is statistically significantly different from estimated white support ($p < 0.01$).

** All minority support includes Hispanic, Asian, and other minority groups.

Figure 19: Racial voting patterns for Louis Jones (white male) and George Furman (black male) for the Bayside city council seat in 2010. White voters strongly preferred Jones (67-33%) who was the incumbent since 1990. The estimated support among black voters is more ambiguous. Black voters were more likely to support Mr. Jones, but only by a few points. According to the ecological inference models, support for Mr. Jones among black voters was $55.7\% \pm 13\%$ while support for Mr. Furman was $45.1\% \pm 16\%$.

C. Curriculum Vitae

See attached.

Douglas M. Spencer

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ACADEMIC POSITIONS

University of Connecticut

Professor of Law and Public Policy, 2017–

Associate Professor of Law and Public Policy, 2013–2017

- *Courses:* Constitutional Law, Election Law, Introduction to Public Policy (MPA Program), How to Fix Elections: Election Administration in the United States (undergraduate Poli. Sci.)

University of Chicago, Visiting Professor, Harris School of Public Policy, 2018-2019

- *Courses:* The Supreme Court & Public Policy (grad); Constitutional Law (undergrad)

Yale University, Visiting Scholar, Center for the Study of American Politics, 2016-2017

EDUCATION

University of California, Berkeley

Ph.D., Jurisprudence and Social Policy, 2013

Committee: Robert D. Cooter, Kevin Quinn, and Henry E. Brady

J.D., Berkeley Law, 2011

M.P.P., Goldman School of Public Policy, 2008

Columbia University

B.A., Philosophy, *magna cum laude*, 2004

PUBLICATIONS

- Bertrall L. Ross II & Douglas M. Spencer. 2019. "Passive Voter Suppression," *Northwestern University Law Review* (forthcoming).
- Guy-Uriel Charles & Douglas M. Spencer. 2019. "The Law of Gerrymandering," *Political Geometry*, (ed. Moon Duchin et al.) Boston, MA: Birkhauser Science (forthcoming).
- Paul S. Herrnson, Douglas M. Spencer & Jennifer Heerwig. 2018. "The Impact of Organizational Characteristics on Super PAC Financing," in *The State of the Parties 2018*, (ed. John Green et al.) New York: Rowman & Littlefield, pp. 248-262.
- Douglas M. Spencer. 2017. "[Corporations as Conduits: A Cautionary Note About Regulating Hypotheticals](#)," *Stetson Law Review*, 47(2), pp. 225-258 (invited symposium).
- Abby K. Wood and Douglas M. Spencer. 2016. "[In the Shadows of Sunlight: The Effects of Transparency on State Political Campaigns](#)," *Election Law Journal*, 15(4), pp. 302-329.
- Christopher S. Elmendorf and Douglas M. Spencer. 2015. "[Administering Section 2 of the VRA After Shelby County](#)," *Columbia Law Review*, 115(7), pp. 2143-2217.

- Gabriel J. Chin & Douglas M. Spencer. 2015. “Did Multicultural America Result From a Mistake? The 1965 Immigration Act and Evidence From Roll Call Votes,” *U. Illinois Law Review*, 2015(3), pp. 1239-58.
- Chris Elmendorf and Douglas M. Spencer. 2014. “The Geography of Racial Stereotyping: Evidence and Implications for VRA ‘Preclearance’ After Shelby County,” *California Law Review*, 102(5), pp. 1123-80.
- Sean Farhang and Douglas M. Spencer. 2014. “Legislating Incentives for Attorney Representation in Civil Rights Litigation,” *Journal of Law & Courts*, 2(2), pp. 241-71.
- Douglas M. Spencer and Abby K. Wood. 2014. “Citizens United, States Divided: An Empirical Analysis of Independent Political Spending,” *Indiana Law Journal*, 89(1), pp. 315-72.
- Christopher S. Elmendorf and Douglas M. Spencer. 2013. “Are Ballot Titles Biased? Partisanship and Ideology in California’s Supervision of Direct Democracy,” *U.C. Irvine Law Review*, 3(3), pp. 511-49 (invited symposium).
- Douglas M. Spencer and Zachary S. Markovits. 2010. “Long Lines at Polling Stations? Observations from an Election Day Study,” *Election Law Journal*, 9(1), pp. 3-17.

IN PROGRESS

Working Papers

(under review)

Mind the (Participation) Gap: Vouchers, Voting, and Visibility

(with Chris Elmendorf & Abby Wood)

Campaign Finance and the Rhetoric of Corruption: A Conjoint Experiment

(with Alexander Theodoridis)

(under review)

Super PAC Strategies and Tactics

(with Jay Goodliffe and Paul Herrnson)

The Impact of Associational Ties on the Financing of Super PACs

(with Jay Goodliffe, Jen Heerwig, and Paul Herrnson)

Works in Progress

Social Media and Racial Appeals in Political Campaigns

The federal Voting Rights Act creates a special duty on state and local governments to accommodate minority voters and ensure that they have a fair opportunity to elect candidates of their choice in jurisdictions whose politics have been shaped by racial discrimination and conflict. Courts have long treated “racial campaign appeals” as an important indicator of such discrimination and conflict. But to date, analysts have not been able to create objective measures of the extent to which a campaign’s messaging appeals to racial preferences. Advances in face recognition and sentiment make it possible to create measures of racial campaign appeals that do not depend on contested judgments about the social meaning of particular phrases or sentences. Our measure of racial appeals will be very timely. Given the intensity of modern partisanship and the pervasiveness of motivated reasoning, it seems very unlikely that Democratic and Republican judges will be able to decide questions about racial campaign appeals impartially and consistently if their decisions must turn on interpreting and then attributing significance to one or another statement by a candidate. Because our measure is objective and does not require judges to interpret the social meaning of particular campaign statements, it should help judges who have very different prior beliefs about racism in the United States today to reach similar results in similar cases.

Democratic Responsiveness in State Policy Implementation (with Miranda Yaver)

A question at the core of American politics and policymaking is to what extent elected representatives act in ways that reflect the preferences of the electorate to which they are accountable. This issue of democratic responsiveness has been evaluated in depth in the context of legislative behavior and the role of public opinion in shaping legislators' votes. An important limitation to the existing studies is their failure to disentangle de facto and de jure policymaking at the state level. The practice of measuring policy adoptions is common, with the observation that once adopted, policies are rarely appealed. Yet policies may in fact stay "on the books" while changing with respect to the nature and vigor of their actual enforcement given developments in public opinion or the partisan configuration in which the relevant institutions are operating. We seek in this paper to remedy what we see as an important oversight in the democratic responsiveness literature to date, and work to answer the following core question: To what extent, and under what conditions, does public opinion shape the vigor of state-level policy enforcement? We evaluate this within the policy domains of the death penalty and hate crimes, but hope to extend to additional policies in future work.

Other Writing

"How Surveys Can Strengthen the Voting Rights Act."

SSN KEY FINDINGS BRIEF, May 2017.

"Affirmative Action Setback in the Supreme Court Could Be a Boost to Voting Rights."

THE NEW REPUBLIC, April 29, 2014 (with Chris Elmendorf).

"Fears Over the Impact of Citizens United May Be Misplaced."

LONDON SCHOOL OF ECONOMICS USAAPP BLOG, January 27, 2014 (with Abby Wood).

"New Tools for Bail In: Using the Geography of Discrimination to Reconstruct Preclearance Judicially."

ELECTION LAW BLOG, July 25, 2013 (with Chris Elmendorf).

"How to Save the Voting Rights Act: Here's the best option for Congress."

SLATE, July 17, 2013 (with Chris Elmendorf).

"Are the Covered States "More Racist" than Other States?"

ELECTION LAW BLOG, March 4, 2013 (with Chris Elmendorf).

PRESENTATIONS

Conferences, Symposia and Academic Workshops

2018 Conference on Empirical Legal Studies. University of Michigan. Poster presentation. "Mind the (Participation) Gap: Vouchers, Voting, and Visibility." November 9.

Northeastern Political Science Association Annual Meetings. Montreal, Canada. Paper presentation. "Are Super PACs the Downfall of Transparent Campaigns? Funding Sources and Their Impact on Campaign Activity." November 8.

American Political Science Association Annual Meetings. Boston MA. Paper presentation. "The Electoral Bogeyman: Beneficiaries and Targets of Super PAC Spending." August 31.

Political Economy & Public Law Conference, University of Connecticut School of Law. Discussant for Dane Thorley, "The Limitations of Procedure: A Randomized Field Experiment Testing the Efficacy of Judicial Recusal and Disclosure." June 16.

American Law & Economics Association, Boston University. Paper presentation, "Mind the (Participation) Gap: Vouchers, Voting, and Visibility." May 12.

Midwest Political Science Association, Chicago, IL. Paper presentation, "Mind the (Participation) Gap: Vouchers, Voting, and Visibility." April 3.

- 2017** American Political Science Association, San Francisco, CA. Paper presentation, "The Impact of Associational Ties on the Financing of Super PACs." September 1.
- Political Economy and Public Law Conference, University of Southern California Gould School of Law. Paper presentation, "Campaign Finance and the Rhetoric of Corruption: A Conjoint Experiment." April 16.
- Symposium: Can Corporations Be Good Citizens? How Corporate Law, Litigation, Lobbying and Money in Politics Intersect, Stetson Law School, Gulfport, FL. Paper presentation, "Corporations as Conduits: A Cautionary Note About Regulating Hypotheticals." March 24.
- 2016** Conference on Money and the First Amendment, University of Colorado, Boulder. Paper presentation, "Campaign Finance and the Rhetoric of Corruption." April 15.
- Midwest Political Science Association, Chicago, IL. Paper presentation, "Minority Turnout and the Political Incentives to Discriminate after *Shelby County*." April 8.
- 2015** Conference on Empirical Legal Studies, Washington University in St. Louis. Discussant for Marc Meredith and Michael Morse, "Discretionary Disenfranchisement: The Case of Legal Financial Obligations." October 30.
- Empirical Studies in Public Law Workshop, Hebrew University, Jerusalem. Paper presentation, "Administering the Voting Rights Act After *Shelby County*." May 25.
- Center for Law and Social Science Workshop, University of Southern California. Paper presentation, "Administering Section 2 of the VRA After *Shelby County*." March 30.
- Workshop on Voting Rights, Ash Center for Democratic Governance and Innovation, Harvard Kennedy School. Paper presentation, "Administering Section 2 of the VRA After *Shelby County*." March 27.
- American Association of Law Schools, Washington DC. Paper presentation, "Multilevel Regression with Poststratification: Implications for Legal Scholarship." (Winner of the Law & Social Science Section's call for papers on "Extreme Empirical Methods.") January 6.
- 2014** Conference on Empirical Legal Studies, Berkeley, CA. Paper presentation, "After *Shelby County*: Getting Section 2 of the VRA to Do the Work of Section 5." November 7.
- Faculty Workshop, UConn School of Law, Hartford, CT. Paper presentation, "After *Shelby County*: Getting Section 2 of the VRA to Do the Work of Section 5." October 8.
- Southeastern Association of Law Schools, Amelia Island, FL. Paper presentation, "A Precautionary Tale From State Campaign Finance." August 5.
- Political Economy and Public Law Conference, University of Rochester. Paper presentation, "The Geography of Discrimination: Evidence and Implications for Voting Rights After *Shelby County*." May 29.
- Midwest Political Science Association, Chicago, IL. Paper presentation, "Administering Section 2 of the VRA After *Shelby County*." April 5.
- 2013** Political Science Faculty Colloquium, University of Connecticut. Paper presentation, "The Geography of Racial Stereotyping: Implications for VRA 'Preclearance' After *Shelby County*." October 28.
- Cooperative Congressional Election Survey (CCES) Conference, Sundance, UT. Paper presentation, "The Geography of Discrimination in Voting: MRP Meets the VRA." May 24.
- 2012** Faculty Workshop, UConn School of Law. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." November 12.

Conference on Empirical Legal Studies, Stanford, CA. Paper presentation, "In the Shadows of Sunlight: Measuring the Effects of Transparency on State Political Campaigns." November 10.

Faculty Workshop, UC Davis School of Law. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." October. 25.

Faculty Workshop, George Mason Law School. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." October 23.

Law & Economics Workshop, Berkeley Law. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." September 17.

Symposium on Nonpartisan Election Administration, Redistricting, and Campaign Finance, Irvine, CA. Paper presentation, "Are Ballot Titles Biased? Partisanship in California's Supervision of Direct Democracy." September 13.

Law & Society Association, Honolulu, HI. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." June 6.

American Law & Economics Association, Stanford, CA. Paper presentation, "Economic Recovery Rules and Attorney Representation in Job Discrimination Litigation." May 18.

Midwest Political Science Association, Chicago, IL. Paper presentation, "Regulate or Delegate? Implications for Election Law." April 14.

Midwest Political Science Association, Chicago, IL. Paper presentation, "Citizens United, States Divided: Evidence of Elasticity in Independent Expenditures." April 13.

Western Empirical Legal Studies Conference, UCLA School of Law. Paper presentation, "Economic Recovery Rules and Attorney Representation in Civil Rights Litigation." February 18.

2011 American Political Science Association, Seattle, WA. Paper presentation, "Citizens United, States Divided? The Interaction of Transparency and Spending in State Elections." September 3.

Law & Society Association, San Francisco, CA. Paper presentation, "Economic Recovery Rules and Attorney Representation in Civil Rights Litigation." June 3.

Midwest Political Science Association, Chicago, IL. Paper presentation, "Constitutions and Close Elections." April 1.

2010 Conference on Empirical Legal Studies, Yale Law School. Poster, "Constitutions and Credible Commitments: A Modern Day Investment Scheme?" November 5.

2009 Midwest Political Science Association, Chicago, IL. Paper presentation, "Long Lines at Polling Stations? Observations from an Election Day Field Study." April 3.

PROFESSIONAL ACTIVITIES

Referee	<i>Journal of Empirical Legal Studies</i>	<i>Election Law Journal</i>
	<i>Supreme Court Economic Review</i>	<i>Electoral Studies</i>
	<i>Political Research Quarterly</i>	<i>American Politics Research</i>
	<i>Law & Social Inquiry</i>	

Expert witness (rebuttal on behalf of Colorado Secretary of State) in defense of state campaign finance law. Case: *Holland v. Williams*, No. 16-cv-00138-RM-MLC (2018)

Chair, Section on Law and Social Sciences, *Association of American Law Schools*, 2016-2017

Expert witness (consulting) for Voting Rights Act, *Chicago Lawyers' Committee for Civil Rights*, 2015

Researcher, *Pew Center on the States' Military and Overseas Voting Reforms Project*, 2011

Researcher, *Pew Center on the States / Early Voting Information Center*, 2009-2010

HONORS, AWARDS, & FELLOWSHIPS

Research Grant (\$14,000) from the MIT Election Data and Science Lab (2017)

Excellence in Teaching Award, UConn Department of Public Policy, 2013, 2014, 2015

Research Grant (\$2,000) from the Berkeley Experimental Social Science Laboratory, 2012

Berkeley Empirical Legal Studies Fellow, 2010-2011

Berkeley Law and Economics Fellow, 2009-2010

Research Grant (\$4,000) from the Pew Center on the States, 2008

Research Grant (\$15,000) from the UC Berkeley Survey Research Center, 2007-2008

Outstanding Graduate Student Instructor, UC Berkeley, 2007 & 2011

Outstanding Graduate Student Instructor, UC Berkeley Political Science Department, 2007

NON-ACADEMIC EMPLOYMENT

Treasurer, Chris Mattei for CT Attorney General campaign, 2017-2018

Law Clerk, Lawyers' Committee for Civil Rights of the San Francisco Bay Area, Summer 2011

Researcher, Pew Center on the States, Military and Overseas Voting Reforms Project, 2011

Program Assistant, International Finance Corporation (World Bank Group), Washington, DC, 2005-2006

Congressional Liaison, United States Department of the Interior, Washington DC, 2005

Election Monitor, Asian Network for Free Elections, Thailand National Election, February 2005

Chief Interpreter, Russian National Olympic Delegation, 2002.